

## REMARKS

### File History

In the non-final Office action of 1/26/2007, the following rejections appear to have been made:

- > Claims 1-15, 21-23, 24 were rejected under 35 USC §103(a)/102(e) as being obvious over You (US 6,706,613) in combination with Wang (US Pub 2005/0110102 published 5/26/05 on basis of application filed 11/25/03). Reference was also made to Fujimoto (US 6,830,973) as part of the justification for rejection.
- > Claims 11, 26 and 27 were rejected under 35 USC §112 as lacking written description support. (No art. was applied against claims 26-27.)
- > Claims 25 and 28 were indicated to contain allowable subject matter.

### Summary of Current Response

Claim 24 is amended merely to correct an obvious spelling error. Applicant addresses the §112 rejections and renews earlier arguments as supported by the previously submitted Rule 132 Declaration.

### Paraphrasing of Rejection

If understood correctly by Applicant, the current art-based rejection boils down to these points:

- The submitted Rule 132 Declaration is dismissed as merely stating an opinion (i.e., regarding what the ordinary artisan would have done -- "would avoid" use of hydrogen) --See OA page 6, ¶6;
- The PTO persists with its proposed combination of You '613 and Wang '102 by asserting that a combination cannot be rebutted by attacking the references individually and also by asserting that the motivation originally supplied is "sufficient"--See OA page 7, top 6 lines.

### **Traversal of the §112 Rejections**

Fig. 3A of the application (as originally filed) shows an ONO-type memory cell stack 300 that does not include a metal silicide layer. Fig. 3A shows that hydrogen (denoted in symbol 320) is being applied to the illustrated ONO-type memory cell stack 300.

It is well established that drawings generally form part of the written description. See Cooper Cameron Corporation v. Kvaerner Oilfield Products 291 F.3d 1317, 1323, 62 USPQ2d 1846 (Fed. Cir. 2002) ["In Vas-Cath, we held that "under proper circumstances, drawings alone may provide a 'written description' of an invention as required by § 112." ... Drawings constitute an adequate description if they describe what is claimed and convey to those of skill in the art that the patentee actually invented what is claimed." ] --this citing Vas-Cath Inc. v. Mahurkar, 935 F.2d 1555, 1563, 19 USPQ2d 1111, 1116-119 (Fed. Cir. 1991).

It is also established in this record as an uncontroverted fact that a person of ordinary skill would not apply hydrogen when oxidizing a stack containing a metal silicide due to the catalytic properties of hydrogen. See Rule 132 Declaration page 5, ¶4d. Thus there are two bases for concluding that those skilled in the art would recognize the present application as teaching that a metal silicide is not present in the stack structure when the hydrogen of the ISSG process is supplied. Moreover, it is well established that an inventor does not have to repeatedly say that a disclosed embodiment is one that excludes inoperable parts. See In re Angstadt, 537 F.2d 498, 504 (CCPA 1976) for the proposition that it is not necessary that every permutation within a generally operable generic claim of invention be effective in order for an inventor to obtain a generic claim.

In light of the above, it is respectfully submitted that the application provides sufficient written description for an ONO-type memory cell stack that does not include a metal silicide at the time of the ISSG process.

### **Traversal of the §103 Rejections**

Once an Applicant has submitted rebuttal evidence and/or arguments, it is incumbent upon the Examiner to reconsider the entirety of the record and make determinations based on

the preponderance of the evidence. See In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976); In re Glaug 62 USPQ2d 1151, 1152-1153 (Fed. Cir. 2002).

The person of ordinary skill (PHOSITA) as set forth in 35 USC §103 is not available for interrogation at the present moment. This is because PHOSITA exists only in the past. The only possible and fair inquiry therefore is that of receiving expert opinions regarding what a hypothetical PHOSITA would have done without benefit of hindsight.

103 (a): A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole **would have been** obvious **at the time the invention was made** to a *Person Having Ordinary Skill In The Art* [PHOSITA] to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Thus when the submitted Rule 132 Declaration opines at the end of paragraph 4d therein that "an ordinary artisan would heed the directions of You '613 and would avoid using a thermal oxidation process that includes hydrogen" [*Emphasis added*], this exactly the type of testimonial evidence that 35 USC §103 calls for. How would PHOSITA have understood the reference at the critical time? What positive or negative teachings would PHOSITA have gleaned from reading the reference at the critical time? (Note also paragraph 4b of the Rule 132 Declaration where the deponent declares: "Instead I am opining, based on my education, background, and review of the above-stated materials, regarding what an ordinary artisan (at or before the critical date) would have understood from the applied prior art documents, from general knowledge in the art, and what an ordinary artisan would have been motivated to do or not do in light of such documents but without having hindsight knowledge of the invention set forth in the subject patent application.")

Preponderance of the evidence means that the scales of justice are placed on the decision-maker's bench. Evidence in favor of obviousness is placed on one side of the scales and evidence in favor of nonobviousness (or at least negating obviousness) is placed on the other side. Then the weights of the two are tested against one another.

In the instant case, it is respectfully submitted that the Office has proffered no evidence regarding how PHOSITA would read the term "dry oxidation" in the context of You '613. By contrast, Applicant has submitted expert testimony from a credentialed declarant to

the effect that the term "dry oxidation" in the context of You '613 means no hydrogen. Not only has the Rule 132 Declarant provided an expert opinion in this respect, he has also provided a clear explanation of how and why he came to this opinion. The Patent Office cannot fairly ask for more.

Similarly, when it comes to motivation for combining You '613 with Wang '102, the submitted Rule 132 Declaration opines at the end of paragraph 6b therein that "Wang '102 cannot be logically combined with You '613 because You has a metal silicide layer." Once again, the Rule 132 Declarant provides all that could fairly be demanded of him; an expert opinion and a clear explanation of how and why he came to this opinion.

By contrast, the Office has not provided evidence of equal caliber as to why PHOSITA might be motivated to combine You '613 with Wang '102. The Office has not countered the submitted Rule 132 Declaration. Its evidence remains uncontroverted.

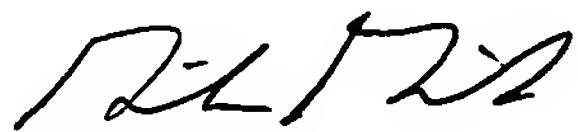
Thus, when the weights of evidence are placed on the opposing scales of justice with regards to teachings and motivations, the preponderance of evidence clearly tips in favor of finding nonobviousness.

### **CONCLUSION**

In light of the foregoing, Applicant respectfully requests that the outstanding grounds of rejection be withdrawn and the claims be reconsidered and allowed. Should any other action be contemplated by the Examiner, it is respectfully requested that he contact the undersigned at (408) 392-9250 to discuss the application.

The Commissioner is authorized to charge any underpayment or credit any overpayment to Deposit Account No. 50-2257 for any matter in connection with this response, including any fee for extension of time and/or fee for additional claims, which may be required.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on April 20, 2007.




4-20-07

Attorney for Applicant(s)

Date of Signature

Respectfully submitted,



Gideon Gimlan  
Attorney for Applicants  
Reg. No. 31,955

MacPherson Kwok Chen & Heid LLP  
2033 Gateway Place, Suite 400  
San Jose, CA 95110  
Tel: (408) 392-9250  
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LAW OFFICES OF  
MacPherson, Kwok, Chen &  
Heid LLP  
2033 Gateway Place  
Suite 400  
San Jose, CA 95110  
Telephone (408) 392-9520  
Fax (408) 392-9262